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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/998,030	11/29/2001	Michael Johannes Deindl	DE920000045US1	6811
75	590 09/10/2004	EXAMINER		
Marilyn Smith		RAMPURIA, SATISH		
International Business Machines Corporation Intellectual Property Law Dept., Internal Zip 4054 11400 Burnet Road			ART UNIT	PAPER NUMBER
			2124	
Austin, TX 78	8758		DATE MAILED: 09/10/2004	4

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)				
Office Action Commons	09/998,030	DEINDL ET AL.				
Office Action Summary	Examiner	Art Unit				
	Satish S. Rampuria	2124				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on 29 No.	ovember 2001.					
2a) This action is FINAL . 2b) ⊠ This	action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	33 O.G. 213.				
Disposition of Claims						
 4) Claim(s) 1-12 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1-12 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. 						
Application Papers	·					
9)☐ The specification is objected to by the Examine	•					
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list of	s have been received. s have been received in Applicati ity documents have been receive ı (PCT Rule 17.2(a)).	on No ed in this National Stage				
Attachment(s)	_					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail Da					
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date		atent Application (PTO-152)				

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DETAILED ACTION

1. This action is in response to the application filed on 11/29/2001.

2. Claims 1-12 are pending.

Priority

3. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copies have been received on 11/29/2001.

Claim objections

4. Claims 1 and 9 are objected to because of the following informalities:

Regarding claim 1, the word "between" is printed twice.

Regarding claim 9, the steps should be numbered as i) and ii) instead i) and i).

Appropriate correction is required.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 1, 7, and 11 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The claims are non-statutory because they recite components of debugging chipcard application, representing functional descriptive material without a computer readable medium or

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computer implemented, program per se are not tangibly embodied. Claims 1-7 and 11 thus amounts to only abstract idea and are nonstatutory.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1, 3, 4, and 7-12 are rejected under 35 U.S.C. 102(b) as being anticipated by European Publication No. EP0356237 to Shinagawa (hereinafter called Shinagawa).

Per claims 1 and 3:

Shinagawa disclose:

- A method for debugging chipcard applications (col. 2, lines 37-38 "provide an IC card... operation test and a debugging of an application program") comprising:
- using a chipcard application/terminal application standard communication protocol (col. 4, lines 9-10 "MPU 1 communicates data with the terminal via the signal input/output unit 2") for transporting business commands of a terminal application to a chipcard application (col. 4, lines 37-39 "These data items are transferred between the IC card and the terminal having the IC card reader/writer") and debug information of a debug control

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program to the chipcard application (col. 5, lines 11-16 "a debug processing data write program or debugger program to load in a debug processing data... including information to... initiating... or an execution start... of the application program"); and

- evaluating the business commands and debug information (col. 6, lines 1-2 "MPU 1 decodes a command supplied from the external device") in a module layered between the chipcard application and the terminal application, and between the chipcard application and the debug control program (col. 3, lines 30-33 "the application program can be partially executed so as to output a result of the execution to the external device"). It is interpreted that IC cards can be a JAVA card or smart card.

Per claim 4:

Shinagawa disclose:

- wherein evaluating the business commands and debug information further comprises determining whether an incoming command is an incoming debug instruction (col. 6, lines 29-34 "if command indicates a write a command of debug processing data, the debug processing data... loads the debug processing data... with the debug processing data sent from the external device").

Per claim 7:

Shinagawa disclose:

- A method for debugging chipcard applications (col. 2, lines 37-38 "provide an IC card... operation test and a debugging of an application program") comprising:

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- evaluating debug control information to distinguish between debug information input (col. 6, lines 1-2 "MPU 1 decodes a command supplied from the external device") and business information input to a chipcard application (col. 4, lines 37-39 "These data items are transferred between the IC card and the terminal having the IC card reader/writer");

- sending, based upon the evaluation, debug information output to a debug control program and business information output to a terminal application (col. 6, lines 23-34 "In the ordinary processing mode, when the command from the external device is a write command... so-called downloading is achieved... execute the program write program... store the data of application program... if command indicates a write a command of debug processing data, the debug processing data... loads the debug processing data... with the debug processing data sent from the external device").

Per claim 11:

Shinagawa disclose:

- means for enabling an evaluation of debug control information for distinguishing between debug information input (col. 6, lines 1-2 "MPU 1 decodes a command supplied from the external device") and business information input to a chipcard application(col. 4, lines 37-39 "These data items are transferred between the IC card and the terminal having the IC card reader/writer");
- means for sending, based upon the evaluation, debug information output to a debug control program and business information output to a terminal application (col. 6, lines 23-34 "In the ordinary processing mode, when the command from the external device is a

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write command... so-called downloading is achieved... execute the program write program... store the data of application program... if command indicates a write a command of debug processing data, the debug processing data... loads the debug processing data... with the debug processing data sent from the external device").

Claims 8 and 10 are the computer program product claim corresponding to method claim 1 and rejected under the same rational set forth in connection with the rejection of claim 1 above.

Claim 9 is the computer program product claim corresponding to method claim 7 and rejected under the same rational set forth in connection with the rejection of claim 7 above.

Claim 12 is the system claim corresponding to method claim 7 and rejected under the same rational set forth in connection with the rejection of claim 7 above.

Substantially as claimed.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shinagawa in view of admitted prior art.

Per claims 2:

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Shinagawa does not explicitly disclose debug information is transported within Application Protocol Data Units (APDUs).

However, admitted prior art discloses in an analogous computer system debug information is transported within Application Protocol Data Units (APDUs) (Applicant's specification, page 2, 3rd paragraph "running a chipcard application in cooperation with the respective terminal application the master issues a command wrapped-in in a message-like format, the so-called Application Protocol Data Unit").

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the method of using Application Protocol Data Unit as taught in admitted prior art in corresponding to the method of debugging chipcard as taught by Shinagawa. The modification would be obvious because of one of ordinary skill in the art would be motivated to the Application Protocol Data Unit to provide an efficient debugging development of chipcard applications as suggested in admitted prior art (Applicant's specification, page 3, 4th paragraph).

11. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shinagawa in view of US Publication No. 2001/0000814 to Montgomery et al. (hereinafter called Montgomery).

Per claims 5 and 6:

Shinagawa does not explicitly disclose sending the incoming command to the chipcard application; receiving a response from the chipcard application; and sending the response to the

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debug control program if the incoming command was determined to be an incoming debug instruction.

However, Montgomery discloses in an analogous computer system sending the incoming command to the chipcard application (pub page 2, paragraph 25 "smart card... waits... it receives a response... from the terminal"); receiving a response from the chipcard application (pub page 2, paragraph 25 "once the response has been received, the smart card... returns to idle state... to communicate with the terminal"); and sending the response to the debug control program if the incoming command was determined to be an incoming debug instruction (pub, page 4, paragraph 40 "Referring to FIG. 10, one such application begins with executing a debugging routine (ST101), for example, a memory test routine").

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the method of sending command to the chipcard and identifying the debug command as taught by Montgomery in corresponding to the method of debugging a chipcard as taught by Shinagawa. The modification would be obvious because of one of ordinary skill in the art would be motivated to identify the command and based on result start the processing as suggested by Montgomery (page 1, paragraph 4).

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Satish S. Rampuria whose telephone number is 703-305-8891.

The examiner can normally be reached on 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Kakali Chaki** can be reached on **(703) 305-9662**. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Satish S. Rampuria Patent Examiner Art Unit 2124 09/07/2004 KAKALI CHAKI SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2100